

REMARKS

This Amendment is in response to the Office Action of January 23, 2008 in which claims 1-47 were rejected.

I. Amended claims

To overcome the claim rejections in the first Office Action, independent claims 1, 44, 45 and 46 have been amended by adding the features of claims 3 and 10 and the feature that Session Description Protocol (SDP) attributes allow for the communication of session parameters, which is for instance disclosed in the present application in the paragraph bridging pages 8 and 9 and the paragraph bridging pages 22 and 23. The expression “a Session Description Protocol SDP” was changed to “the Session Description Protocol, SDP” to clarify that the known Session Description Protocol as defined by the IETF is meant. This is originally disclosed at the end of the second paragraph on page 8. Dependent claims 3 and 10 were cancelled, accordingly.

Furthermore, in the independent claims, the explicit step of transmitting the common data from the sender to the plurality of receivers was removed, since it is not essential for the present invention.

Dependent claims 12-36 and 38-42 and independent protocol claim 47 have been cancelled without prejudice. Withdrawal of the indefiniteness and statutory subject matter rejections of claims 32 and 47 and 42 and 47 is requested. Applicant however reserves the right to re-introduce the subject matter of these claims and/or to file continuation applications directed to the subject matter of these claims at a later stage of the proceedings.

In independent claim 9, the expressions “a Multimedia Broadcast/Multicast Service (MBMS) as defined by a Third Generation partnership Project (3GPP)” was clarified to read as “the Multimedia Broadcast/Multicast Service as defined by the Third Generation Partnership Project”. This is disclosed in the second paragraph on page 10.

Dependent claims 48-50, 51-53 and 54-56 were added based on original claims 8 and 9, 11 and 37, respectively.

II. Subject matter of the invention

The amended claims relate to a method, a computer readable storage medium, a system, a sender and a receiver. At least one session parameter, which is related to a transmission of common data from a sender to a plurality of receivers within a transmission session, is communicated to the plurality of receivers via an attribute of the Session Description Protocol (SDP). The attribute of the SDP is a Forward Error Correction (FEC) attribute that specifies at least an FEC encoding scheme that is used for said transmission of the common data within the transmission session.

III. Prior art

RFC 2327 – SDP: Session Description Protocol, April 1998 (*Handley et al*)

This document defines the Session Description Protocol, SDP. SDP is intended for describing multimedia sessions for the purposes of session announcement, session invitation, and other forms of multimedia session initiation.

Reliable Multicast Transport Building Block: Forward Error Correction Codes (draft-ietf-rmt-bb-fec-01.txt), *Luby et al*, July 2000

*Luby et al* describes the use of Forward Error Correction (FEC) codes within the context of reliable IP multicast transport and provides an introduction to some commonly-used FEC codes.

IV. Novelty of the amended independent claims

As rightly stated by the Examiner in the second paragraph on page 4 of the Office Action, *Handley et al* describes the Session Description Protocol (SDP), but does not disclose that the SDP can be used to define an FEC attribute that specifies at least an FEC encoding scheme that is used for the transmission of common data in a transmission session.

Furthermore, it is noted that *Luby et al* does not pertain to the SDP at all, and thus already fails to disclose that at least one session parameter is communicated to a plurality of receivers via an attribute of the SDP.

The amended independent claims are thus novel with respect to the cited prior art documents.

V. Inventiveness of the amended independent claims

As already discussed above, *Handley et al* may be considered to disclose all features of the amended independent claims, except the features that said attribute of the SDP is an FEC attribute that specifies at least an FEC encoding scheme that is used for said transmission of said common data within said transmission session.

A technical effect achieved by this difference between the amended independent claims and the system described by *Handley et al* may be considered to be that information on an FEC encoding scheme used for the transmission of the common data within the transmission session can be communicated to the plurality of receivers.

A problem of the invention is thus to provide a possibility to communicate information on an FEC encoding scheme used for the transmission of common data within a transmission session.

A solution to this problem is not rendered obvious by any of the cited prior art documents.

In particular, *Handley et al* explicitly confines the applicability of the SDP to conveying information to be able to join a session and to announcing the resources to be used (see section 5), and discloses that the following types of information may be defined by SDP:

- Media information (section 5.1),
  - timing information (section 5.2),
  - information on private sessions (section 5.3),
  - information on how to obtain further information on a session (section 5.4),
- and
- categorization information (section 5.5).

It is however not disclosed that also information pertaining to the transmission *per se*, as the FEC encoding scheme used in the transmission session, could be communicated via SDP.

In particular, the following is stated in the third paragraph of section 2 of *Handley et al*:

*SDP is intended to be general purpose so that it can be used for a wider range of network environments and applications than just multicast session directors. However, it is not intended to support negotiation of session content or media encodings – this is viewed as outside the scope of session description.*

This statement clearly teaches a person skilled in the art that the SDP is not a protocol suited for the distribution of information on the FEC encoding used in the transmission session.

*Luby et al* discloses in its section 3 (starting on page 13) the information that protocol packets must carry to implement the various forms of FEC-based reliability. There are three classes of packets that may contain FEC information within a session: data packets, session-control packets and feedback packets. Therein, only data packets and session-control packets are said to travel downstream (from the sender to the receiver). It is also stated that an FEC encoding identifier can only be present in downstream packets.

An FEC encoding identifier is either contained in a data packet or a session-control packet.

Therein, data packets are understood as the packets that are exchanged within a transmission session from the sender to one or more receivers. They thus correspond to the “common data” according to the claim language.

Session-control packets are understood as packets that are exchanged within a transmission session, but contain information for control of the session rather than actual net data. An example of a session-control protocol in the context of streaming sessions is the Real-Time Streaming Protocol (RTSP). However, the packets of the RTSP or, in more general, the session-control protocol are also communicated within the (streaming) session.

*Luby et al* thus teaches a person skilled in the art that an FEC encoding identifier is best transmitted in packets that are communicated during a transmission

session. This does however not apply to the packets of the SDP, since SDP packets are communicated prior to a transmission session.

In summary, *Handley et al* thus clearly instructs a skilled person that the SDP is not intended for communicating parameters related to media encoding (such as an FEC attribute that specifies an FEC encoding scheme), and *Luby et al* instructs a skilled person that information on the FEC encoding scheme is best communicated within a transmission session, not before.

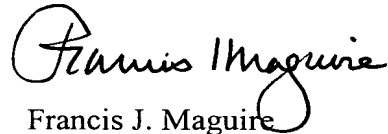
*Handley et al* and *Luby et al* are thus evidently not suited to render the subject matter of the amended independent claims obvious.

As an added note, the present invention arose from a scenario wherein it was conceived that services offered by the File Delivery over Unidirectional Transport (FLUTE) might be advantageously made available to the Third Generation Partnership Project's (3GPP) Multimedia Broadcast/Multicast Service (MBMS). In this constellation, where IP-based content would be transferred to a plurality of mobile receivers, a couple of parameters required for the MBMS session could not be made available to the mobile receivers, *inter alia* the FEC encoding scheme used. The inventors perceived that a particularly elegant way of making these parameters available to the mobile receivers would be to "abuse" the SDP for this purpose. Without this insight, a much more cumbersome solution, for instance changing the existing protocols (FLUTE, etc.) to be able to convey these parameters would have had to be undertaken. It will of course be realized that the presently claimed invention, at least in the independent claims, is not limited to this scenario.

It is not believed that any extension of time fees are due on account of this amendment but if that belief is incorrect, the Commissioner is authorized to consider this paper to be a petition for the correct extension of time period and to deduct the appropriate extension of time fee from our Deposit Account No. 23-0442. Similarly, it is not believed that any extra claims fees are due on account of this amendment but if that belief is incorrect, the Commissioner is authorized to deduct the correct extra claim fees from our Deposit Account No. 23-0442.

The objections and rejections of the Office Action of January 23, 2008, having been obviated by amendment or shown to be inapplicable, withdrawal thereof is requested and passage of amended claims 1-2, 4-9, 11, 37, 43-46 and 48-56 to issue, is earnestly solicited.

Respectfully submitted,

A handwritten signature in black ink, reading "Francis J. Maguire". The signature is written in a cursive style with a large, looping initial "F".

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